I. AMENDMENTS

In the claims:

This listing of claims will replace all prior versions and listings of claims in the subject application.

Claims 1. to 73. (Currently Canceled).

74. (Currently Amended) A compound having the following structure:

$$\begin{array}{c|c} R & H & H & O \\ \hline & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

wherein:

n is 0, 1 or 2;

X is selected from the group consisting of CH_2 , cis-CH=CHCH₂, trans-CH=CHCH₂, $CH_2OC(=O)$, NHC(=O)O, $C=CCH_2$, SO_2 , $NHCH_2CH_2CH_2NHC(=O)$ and $CH_2C_6H_5OCH_2$ $CH_2C_6H_4OCH_2$;

Y is selected from the group consisting of oxygen and C(=O)NH, wherein,

when Y is oxygen, A and D are chlorine and B and E are hydrogen;

when Y is C(=O)NH, B and E are chlorine and A and D are hydrogen;

R is selected from the group consisting of CH_3 , $HOCH_2CH_2$, $H_2NC(=NH)NHCH_2CH_2$, $HOC(=O)CH_2CH_2$, $H_2NC(=O)NH$, C_6H_5 , $C_6H_5CH_2$, $C_6H_5OCH_2$ and polyethylene glycol-(PEG)_OC(=O)CH_2CH_2,

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 R^1 is selected from the group consisting of hydrogen, Li^+ , Na^+ , $(C_1 - C_6 \text{ alkyl})_m N(H)_{4-m}^+$ and polyethyleneglycolyl, wherein m is 0-3.

- 75. (Previously Added) The compound of claim 74, wherein n is 0.
- 76. (Previously Added) The compound of claim 75, wherein X is CH₂.
- 77. (Previously Added) The compound of claim 76, wherein R is selected from the group consisting of: $NH_2C(=NH)NHCH_2CH_2$,

78. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-3-cephem-4-carboxylic acid (Compound 9).

- 79. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(1-tetrazoleacetamido)-3-cephem-4-carboxylic acid (Compound 29).
- 80. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[2-(3*H*-imidazol-4yl)]-acetamido-3-cephem-4-carboxylic acid (Compound 31).
- 81. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(1-phenyl-2-aminoacetamido)-3-cephem-4-carboxylic acid (Compound 38).
- 82. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[4-(2-aminothiazole)-yl-2-acetamido]-3-cephem-4-carboxylic acid (Compound 39).
- 83. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[2-(4-hydroxyphenoxy)acetamido]-3-cephem-4-carboxylic acid (Compound 40).
- 84. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-[2-amino-2-(4-hydroxyphenyl)acetamido]-3-cephem-4-carboxylic acid (Compound 41).
- 85. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(3-guanidinylpropyl)acetamido-3-cephem-4-carboxylic acid (Compound 42).
- 86. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-{2-[2-(2-tetrazol-1-yl-acetamido)-thiazol-5-yl]-acetamido}-3-cephem-4-carboxylic acid (Compound 43).

- 87. (Previously Added) The compound of claim 74, wherein the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-1-oxo-3-cephem-4-carboxylic acid (Compound 11).
 - 88. (Previously Added) A compound has having the structure:

wherein n is 4 to 2000 (Compound 32).

- 89. (Previously Added) The compound of claim 74, wherein X is cis-CH=CHCH₂ or trans-CH=CHCH₂.
 - 90. (Previously Added) The compound of claim 89, wherein R¹ is hydrogen.
- 91. (Previously Added) The compound of claim 90, wherein R is selected from the group consisting of

- 92. (Previously Added) The compound of claim 91, wherein n is 0.
- 93. (Currently Amended) A composition, comprising: a pharmaceutically acceptable carrier; and, a compound of claim 74 and a compound of claim 74.

- 94. (Currently Amended) A method of inhibiting the growth of a microorganism bacterium comprising contacting the microorganism bacterium with an effective amount of a compound of any one of claims 74 to 93 claim 74.
- 95. (Currently Amended) A method of inhibiting the growth of a The method of elaim 94, wherein the microorganism-bacterium that expresses a β-lactamase comprising contacting the bacterium with an effective amount of a compound of claim 74.
- bacterium is selected from the group consisting of Staphylococcus aureus, Staphylococcus epidermidis and other coagulase-negative staphylococci, Streptococcus pyogenes, Streptococcus pneumoniae, Streptococcus agalactiae, Enterococcus species, Corynebacterium diphtheriae, Listeria monocytogenes, Bacillus anthracis, Neisseria meningitidis, Neisseria gonorrhoeae, Moraxella catarrhalis, Vibrio cholerae, Campylobacter jejuni, Enterobacteriaceae, Pseudomonas aeruginosa, Acinetobacter species, Haemophilus influenzae, Clostridium tetani, Clostridium botulinum, Bacteroides species, Prevotella species, Porphyromonas species, Fusobacterium species, Mycobacterium tuberculosis, and Mycobacterium leprae, with the proviso that when the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-3-cephem-4-carboxylic acid, the microorganism is not Pseudomonas aeruginosa.
- 97. (Currently Amended) The method of claim 95, wherein the microorganism bacterium is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermis*, *Enterococcus faecalis* and *Enterococcus faecium*.
- 98. (Currently Amended) A method for treating a microbial bacterial infection, comprising administering to a subject in need thereof an effective amount of a compound of any one of claims 74 to 93 claim 74.

- 99. (Currently Amended) A method for treating an infection of a The method of claim 98, wherein the microorganism bacterium that expresses a β-lactamase comprising contacting the bacterium with an effective amount of a compound of claim 74.
- bacterium is selected from the group consisting of Staphylococcus aureus, Staphylococcus epidermidis and other coagulase-negative staphylococci, Streptococcus pyogenes, Streptococcus pneumoniae, Streptococcus agalactiae, Enterococcus species, Corynebacterium diphtheriae, Listeria monocytogenes, Bacillus anthracis, Neisseria meningitidis, Neisseria gonorrhoeae, Moraxella catarrhalis, Vibrio cholerae, Campylobacter jejuni, Enterobacteriaceae, Pseudomonas aeruginosa, Acinetobacter species, Haemophilus influenzae, Clostridium tetani, Clostridium botulinum, Bacteroides species, Prevotella species, Porphyromonas species, Fusobacterium species, Mycobacterium tuberculosis, and Mycobacterium leprae, with the proviso that when the compound is 3-(2-(2,4-dichlorophenoxy)-5-chlorophenoxy)methyl-7-(2-thienylacetamido)-3-cephem-4-carboxylic acid, the microorganism is not Pseudomonas aeruginosa.
- 101. (Currently Amended) The method of claim 99, wherein the microorganism bacterium is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermis*, *Enterococcus faecalis* and *Enterococcus faecium*.